

## Publications

Moore, T. E., M.O. Chandler, M.-C. Fok, B.L. Giles, D.C. Delcourt, J.L. Horwitz, C.J. Pollock, Ring Currents and Internal Plasma Sources, *Space Science Reviews* 95(1/2): 555-568, January 2001

Su, Y.-J., J. E. Borovsky, M. F. Thomson, N. Dubouloz, M. O. Chandler, T. E. Moore, and M. Bohran, Plasmaspheric material on high-latitude open field lines, *J. Geophys. Res.*, 106, 6085, 2001.

Elliott, H. A., R. H. Comfort, P. D. Craven, M. O. Chandler, and T. E. Moore, Solar wind influence on the oxygen content of ion outflow in the high altitude polar cap during solar minimum conditions, *J. Geophys. Res.*, 106, 6067, 2001.

Singh, N., W. C. Leung, T. E. Moore, P. D. Craven, Numerical model of the plasma sheath generated by the plasma source instrument aboard the Polar satellite, accepted by *JGR*, 2001.

## Presentations

Chandler, M. O., P. D. Craven, T. E. Moore, and V. N. Coffey, Plasma and field observations of the day-side, equatorial magnetopause, boundary layers, and magnetosphere, Spring AGU, EOS 82, S364, 2001.

Moore, T. E., M-C Fok, M. O. Chandler, and C. J. Pollock, Component merging on the dayside magnetopause, Spring AGU, EOS, 82, S368, 2001.

Elliott, H. A., R. H. Comfort, P. D. Craven, T. E. Moore, M. O. Chandler, and C. T. Russell, By what process is ion outflow driven?, Spring AGU, EOS, 82 S376, 2001.

Elliott, H. A., R. H. Comfort, P. D. Craven, M. O. Chandler, and T. E. Moore, Case study of solar wind and IMF influences on ionospheric outflow, Huntsville 2000 Workshop.

Coffey, V. N., T. E. Moore, M. O. Chandler, and P. D. Craven, The response of the ionospheric cusp to the solar wind through two perspectives: Low energy charged particle in situ measurements and low-energy neutral atom imaging, *Eos*, 81(48), F1036, 2000.

Zeng, W., J. L. Horwitz, B. A. Stevenson, G. A. Germany, P. D. Craven, F. J. Rich, T. E. Moore, Topside ionosphere parameters observed by POLAR and DMSP at high latitudes, *Eos*, 81(48), F1009, 2000.

Work in progress and proposed (local investigators specified, other welcomed):

Observations of the low-shear magnetopause. Currently this a case study of March 22, 2000 with Polar crossing the magnetopause and sampling the magnetosheath for several hours. Intend to expand to other cases and would like to extend to some modeling of distributions (hopefully with Liemohn and Kazanov's kinetic model) to identify ion sources, determine heating and transport mechanisms. (Chandler)

TIDE/LENA coincident observations of ion heating. Currently doing a survey for "conjunctions" between IMAGE and Polar. Goal is to quantify/localize heating region using side-view from LENA and TIDE in situ. (Chandler and Coffey)

Modeling/data comparison of ion heating in the cusp. Modeling and data comparison to determine heating mechanisms. (This will likely be Vic's thesis work when she passes comps.) (Coffey, Chandler, w/Singh)

Polar observations of ion heating in the cusp correlated with multiple ion injections (follow on to the EGS work that includes Nelson Maynard and Gordon Wilson) (Chandler, Craven)

Plasmaspheric ions near the dayside magnetopause (follow on to AGU talk). Study of source, transport and heating of plasmaspheric ions in the outer magnetosphere. This could involve IMAGE data as well. (Chandler)